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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/611,400	06/30/2003	Mats Lidstrom	013628.00498 (02CXT0077D)	1900
65913	7550	12/12/2008	EXAMINER	
NXP, B.V. NXP INTELLECTUAL PROPERTY DEPARTMENT M/S41-SJ 1109 MCKAY DRIVE SAN JOSE, CA 95131			VO, DON NGUYEN	
			ART UNIT	PAPER NUMBER
			2611	
			NOTIFICATION DATE	DELIVERY MODE
			12/12/2008 ELECTRONIC	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ip.department.us@nxp.com

Office Action Summary

Application No.

10/611,400

Applicant(s)

LIDSTROM ET AL.

Examiner

Don N. Vo

Art Unit

2611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 August 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Acknowledgment

1. This Office Action is responsive to the Amendment filed on 08/13/2008.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 21-24 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The claims are directed to a method of converting first digital signal with first modulation and encoding scheme to a second digital signal with a second modulation and encoding scheme comprising the steps of demodulating, modulating and upconverting without positively recite the other statutory class (particular element, thing or product) to which it is tied, for example, by identifying the apparatus/thing that accomplishes the method steps. Therefore, such processes or steps are categorized as data manipulation per se since it is just a matter of converting one signal type to another signal form (non-functional descriptive material) and constitute non-statutory subject matter. See M.P.E.P. 2106.01.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 11 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Young (US 6,011,950; art of record).

Regarding claims 1, 11 and 21, Young, as shown in figures 1-3, teaches a method and apparatus for transcoding (converting) a received first digital signal with the first modulation and encoding scheme (Fig. 1: 13; Fig. 2: 45; Fig 3: 61) to a second digital signal with a second modulation and encoding scheme comprising demodulator and decoder (Fig. 1: 15 & 17; Fig.2: 46 & 48; Fig.3: 62 & 64), modulator and encoder (Fig. 1: 19 & 21; Fig.2: 54 & 56; Fig.3: 77 & 79). See also column 2, line 50 to column 3, line 13 and column 6, line 31 to column 7, line 19. It is noted that Young does not explicitly teach the upconverter. However, it is inherently known that the QAM modulator includes an upconverter for upconverting and modulating the QAM signal. For example, see previously cited reference Myers (US 6,771,710).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 2-8, 12-18 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Young (US 6,011,950) in view of Myers (US 6,771,710; art of record).

Regarding claims 2-8, 12-18 and 22, Young teaches all subject matter claimed except for the further details of the upconverter comprising upsampler, mixers and combiner. However, Myers, from the same field of endeavor and as shown in figures 1 and 6, teaches an upconverter comprising upsampler (32), complex mixers (34, 36, 40, 42 where the multipliers multiply the data with complex signals Cosine and Sine) and combiner (46) which can be implemented using gate array to improve the fidelity and high speed operation. See Myers: column 2, line 44 to column 4, line 11. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the

system of Young by implementing the upconverter (82) using the arrangement of upsampler, mixers and combiner as taught by Myers so that high fidelity and high speed operation can be achieved.

9. Claims 9, 10, 19, 20, 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Young (US 6,011,950).

Regarding claims 9, 10, 19, 20, 23 and 24, Young teaches all subject matter claimed except for specifying the first modulation and encoding scheme is 8-PSK Turbo Coding and second modulation and encoding scheme is QPSK. Young discloses QPSK or QAM and Viterbi coding instead. See Young: column 2, lines 50-67. However, such 8-PSK or QPSK modulation and Turbo coding is well known in the art of digital communications at the time of invention and therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Young by employing the 8-PSK or QPSK modulation and Turbo coding since it is just an alternative way of modulating and coding the data.

Response to Arguments

10. Applicant's arguments with respect to claims 1-24 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Don N. Vo whose telephone number is (571) 272-3018. The examiner can normally be reached on Mon-Fri (9:00AM - 6:00PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MOHAMMAD GHAYOUR can be reached on (571) 272-3021. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Don N. Vo/
Primary Examiner, Art Unit 2611